

REMARKS

Favorable reconsideration of this application, as presently amended and in light of the following discussion, is respectfully requested.

Claims 1-21 and 23-31 are currently pending. Claim 22 has been canceled without prejudice; and Claims 1, 23, and 29 have been amended by the present amendment. The changes to the claims are supported by the originally filed specification and do not add new matter.

In the outstanding Office Action, Claims 1-14 and 19-31 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,226,095 to Fukuta (hereinafter “the ‘095 patent”) in view of U.S. Patent Application Publication No. 2003/0112461 to Ogura (hereinafter “the ‘461 application”); and Claims 15-18 were rejected under 35 U.S.C. § 103(a) as being unpatentable over the ‘095 patent and the ‘461 application in view of U.S. Patent No. 7,212,306 to Chrisop (hereinafter “the ‘306 patent”).

Amended Claim 1 is directed to an apparatus for forming an image, in which hardware resources for use in the forming of images are provided, and one or more processes run based on programs in respect of the forming of images, the apparatus comprising: (1) an off-line unit configured to put, in response to a notice indicating updating of one of the programs, the one or more processes in an off-line state, in which restriction is placed on the running of the one or more processes; (2) a memory area releasing unit configured to release one or more memory areas used by the one or more processes that are put in the off-line state; and (3) a data laying-out unit configured to lay out data in the one or more memory areas released by the memory area releasing unit. Further, Claim 1 has been amended to incorporate the limitation recited in Claim 22. In particular, amended Claim 1 recites that the data laid out by the data laying-out unit is an updating program for updating at least one of the programs, and the data laying-out unit obtains the updating program through data

communication. Accordingly, the changes to Claim 1 are supported by the originally filed specifically filed specification and do not add new matter.

Applicants respectfully submit that the rejection of Claim 1 is rendered moot by the present amendment to Claim 1. However, since Claim 1 has been amended to incorporate the limitations recited in Claim 22, Applicants will address the rejection set forth in the outstanding Office Action regarding Claim 22.

Regarding the rejection of Claim 22 under 35 U.S.C. § 103(a), the Office Action asserts that the '095 patent discloses everything in Claim 1 with the exception of an offline unit configured to put one or more processes in an offline state, in response to a notice indicating updating of one of the programs, and that the data laid out by the data laying-out unit is an updating program for updating at least one of the programs, the data laying-out unit obtaining the updating program through data communication, and relies on the '461 application to remedy those deficiencies.

The '095 patent is directed to a system in which an image processing apparatus 110 is connected to two color-copying machines 120 and 121, wherein the image processing apparatus has independent frame memories and interfaces associated with each of the copying machines. Further, the '095 patent discloses that when a fault occurs in one copying machine, the memory area allocated to that copying machine within the image processing apparatus is reduced, and the area is reallocated to the other working copying machine. Further, the '095 patent discloses that the memory areas that are allocated are used for generating image data based upon PDL data by the copying machines.

However, as admitted in the outstanding Office Action, the '095 patent fails to disclose an offline unit configured to put, in response to a notice indicating updating of one of the programs, the one or more processes in an offline state, in which restrictions placed on the running of the one or more processes, and that the data laid out by the data laying-out unit is

an updating program for updating at least one of the programs, and the data laying-out unit obtaining the updating program through data communication, as recited in amended Claim 1.

The '461 application is directed to a data updating method for updating data stored in a memory to an image forming apparatus, including the steps of (1) sending electronic mail from an external device to an imaging forming apparatus to call for updating of the data stored in the memory of the image forming apparatus; (2) downloading updating data from a device on a network based on contents of the electronic mail; and (3) executing updating processing for the data stored in the memory, based on the downloaded updating data. As shown in the steps S11 through S14 in Figure 6, the '461 application discloses that operations of the image forming apparatus are prohibited after receiving the email and after the image forming apparatus comes to a standby state. Further, in steps S18 and S19, in Figure 6, the '461 application discloses that data that is downloaded from the server 2 is stored in the download memory 24 and after all updating data has been stored in the download memory 24, the CPU 21 terminates the downloading operation and disconnects itself from the server.¹ Further, the '461 application discloses that, after completing the downloading operation from the server, the CPU 21 updates the control program stored in the ROM 23. In particular, the '461 patent discloses that the control program updating processing is executed by rewriting the control program of the ROM 23 with the updating data stored in the download memory 24.² See also Figure 2, which shows the ROM 23 and the download memory 24, in addition to a main memory 22, a page memory 27, and hard drive 28.

However, Applicants respectfully submit that the '461 application fails to disclose a data laying-out unit configured to layout data in the one or more memory areas released by the memory area releasing unit, wherein the data laid out by the data laying-out unit is an

¹ See '461 application, paragraph [0044].

² See '461 application, paragraph [0045].

updating program for updating at least one of the programs, and the data laying-out unit obtains the updating program through data communication, as recited in amended Claim 1. Rather, the '461 application discloses downloading data from a server into a download memory and then rewriting the ROM 23. The '461 application does not teach or suggest that when a process is put in an off-line state and the memory area used by the process is released, ***a data laying-out unit will use the memory that was released to layout an updating program for updating one of the programs, in that released memory***, as that concept is recited in amended Claim 1.

Thus, no matter how the teachings of the '095 patent and the '461 application are combined, the combination does not teach or suggest a data laying-out unit configured to layout data in the one or more memory areas released by the memory area releasing unit wherein the data laid out by the data laying-out unit is an updating program for updating at least one of the programs, and the data laying-out unit obtains the updating program through data communication, as recited in amended Claim 1. As discussed above, the '095 patent merely discloses that the memory that is used for generating image data based upon PDL data for one color copying machine is reallocated to another copying machine, when the first copying machine has a fault. Further, the '461 patent discloses prohibiting operations while a program is downloaded to a download memory and then rewritten into a ROM. Thus, when the teachings of the '095 patent and the '461 application are combined, the combination will not teach or suggest that in response to a notice indicating updating of one of the programs, one or more processes put in an off-line state, the memory used by the one or more processes is released, and a data laying-out unit is configured to layout in those memory areas that are released an updating program for updating at least one of the programs, as recited in Claim 1.

Accordingly, Applicants respectfully submit that amended Claim 1 (and all similar rejected dependent claims) patentably define over any proper combination of the '095 patent and the '461 application.

Independent Claim 29 is directed to a method of acquiring one or more memory areas in an image forming apparatus includes a data laying out step of laying out data in the one or more memory areas released by memory area releasing step, wherein the data laid out in the data laying out step is an updating program for updating at least one of the programs. As discussed above, the combined teachings of the '095 patent and the '461 application fail to disclose this step. Accordingly, Applicants respectfully submit that the rejection of Claim 29 is rendered moot by the present amendment to that claim.

Regarding the rejection of dependent Claims 15-18 under 35 U.S.C. § 103, Applicants respectfully submit that the '306 patent fails to remedy the deficiencies of the '095 patent and the '461 application, as discussed above. Accordingly, Applicants respectfully submit that the rejections of Claims 15-18 are rendered moot by the present amendment to Claim 1.

Thus, it is respectfully submitted that independent Claims 1 and 29 (and all associated dependent claims) patentably define over any proper combination of the '095 patent, the '461 application, and the '306 patent.

Consequently, in view of the present amendment and in light of the above discussion, the outstanding grounds for rejection are believed to have been overcome. The application as amended herewith is believed to be in condition for formal allowance. An early and favorable action to that effect is respectfully requested.

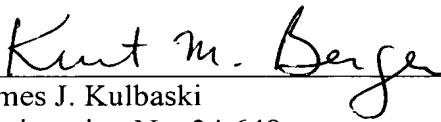
Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.

Customer Number

22850

Tel: (703) 413-3000
Fax: (703) 413-2220
(OSMMN 06/04)



James J. Kulbaski
Registration No. 34,648
Attorney of Record

Kurt M. Berger, Ph.D.
Registration No. 51,461